U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. 10/645.861-7697 Application Number Substitute for form 1449A/PTO Filing Date 8/20/2003 INFORMATION DISCLOSURE First Named Inventor: Wingyu Leung STATEMENT BY APPLICANT **GROUP: 2133** Examiner: Stephen M. Baker (Use as many sheets as necessary) Sheet Attorney Docket Number MST-012-1P U.S. PATENT DOCUMENTS Examiner Cited Document Number **Publication Date** Name of Patentee or Pages, Columns, Lines No. Initials* Number - Kind Code 2 MM-DD-YYYY Applicant of Cited Document Where Relevant Passages or Figures Appear F01 US-3,814,921 06/04/1974 Nibby et al. Sm 07/13/1976 F02 SM US-3,969,706 Proebsting et al. F03 BMS US-4,045,783 08/30/1977 Harland حاى F04 US-4,389,714 06/21/1983 Nakao 81/2 F05 US-4,768,197 08/30/1988 Petolino et al. 3/2 F06 US-4,839,868 06/13/1989 Sato et al. F07 US-4,884,271 345 11/28/1989 Concha et al. 845 F08 US-4,933,904 06/12/1990 Stewart et al. SM F09 US-5,008,886 04/16/1991 Chinnaswamy et al. SMS F10 US-5,235,693 08/10/1993 Chinnaswamy et al. SA F11 US-5,241,503 08/31/1993 Cheng FOREIGN PATENT DOCUMENTS Examiner Cite Publication Pages, Columns, Lines Initials* Name of Patentee or No. Foreign Patent Document Date Where Relevant T6 MM-DD-Applicant of Cited Passages or Figures Cntry Code³ Number⁴ Kind Code^{5 (Vlas} YYYY Document Appear OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER SIGNATURE:** DATE CONSIDERED:

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not confidered, include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. (6 if possible. 6 Applicant is to place a check mark here if English language Translation is effected.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gethering, preparing, and submitting the completed application form to the USPTO. There will vary depending upon the individual case. Any comments on the amount of time you require to complete this form antitor suggestions for reducing this bunden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patentia, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, cell 1-800-PTO-9199 (1-800-786-9199) and select option 2. "EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next commission to applicant. 1 Applicant's unique citation designation number (options), 2 See Kinds Codes of USPTO Patent Documents at www.usplo.gov or MEPP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document. Skind of document by the appropriate symbols as indicated on the document. Skind of document by the appropriate symbols as indicated on the document.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Application Number 10/645,861-7697 Substitute for form 1449A/PTO Filing Date 8/20/2003 INFORMATION DISCLOSURE First Named Inventor: Wingyu Leung STATEMENT BY APPLICANT Examiner: Stephen M. Baker **GROUP: 2133** (Use as many sheets as necessary) Sheet **Attorney Docket Number** MST-012-1P U.S. PATENT DOCUMENTS Cited Examiner Document Number **Publication Date** Name of Patentee or Pages, Columns, Lines Initials* No. 1 Number - Kind Code MM-DD-YYYY Applicant of Cited Document Where Relevant Passages or Figures Appear F12 5/2 US-5,289,584 02/22/1994 Thome et al. F13 SUS US-5,369,651 11/29/1994 Marisetty 3/5 F14 US-5,402,389 03/28/1995 Flannagan et al. SMS F15 US-5,430,742 07/04/1995 Jeddeloh et al. 8M3 F16 US-5,469,558 11/21/1995 Lieberman et al. F17 US-5,502,835 593 03/26/1996 Le et al. 500 F18 US-5,513,148 04/30/1996 Zagar SAS F19 US-5,519,839 05/21/1996 Culley et al. F20 US-5,519,847 5MS 05/21/1996 Fandrich et al. SB F21 US-5,579,267 11/26/1996 Koshikawa F22 SM US-5,586,282 12/17/1996 Imo et al. FOREIGN PATENT DOCUMENTS Examiner Cite Publication Pages, Columns, Lines Initials* No. 1 Foreign Patent Document Date Name of Patentee or Where Relevant MM-DD-T⁶ Applicant of Cited Passages or Figures Cntry Code³ Number⁴ Kind Code^{5 ((flavor)} YYYY Document Appear OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER SIGNATURE:** SIND DATE CONSIDERED:

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and rifot gonsidered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-latter code (WPPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the seriel number of the patent document. 5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is effected.

is etached.

This coflection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 36 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will very depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burnion, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1460, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1450. If you need assistance in completing the form, cell 1-800-PTO-9199 (1-800-788-9199) and select option 2. "EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Drew line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Jepenese patent document, when in Indication of the year of the reign of the Emperor must precede the serial number of the patent document. SiGnd of document by the appropriate symbole as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to pisce a check mark here if English language Translation is attached.

office underes if confedence a united OLID ...

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

	3 . apa.uo	***************************************	<u> </u>	2011 01 1834	, in perac	as no required to respi	NAU (O & COMBCHOTT		ess it contains a valid OMB	N IOTTTOC
Substitute for form 1449A/PTO						Application Number		10/645,861-7697		
						Filing Date		8/20/2003		
INFOI STAT						First Named Inv	entor:	Wingyu Leung		
(Use as many sheets as necessary)						Examiner: Steph	nen M. Baker	GROUP: 2133		
Sheet	3	3 of 5				Attorney Dock	et Number	MST-012-1P		
					U.S	S. PATENT DOC	UMENTS			
Examiner Initials*	Cited No. ¹			ocument Number er - Kind Code ^{24/Income}		Publication Date MM-DD-YYYY		Patentee or Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear	
sas	F23	US-5,592,435		35		01/07/1997	Mills et al.			
SM	F24	US-5,615,169				03/25/1997	Leung			
\$\?	F25	US-5,671,187				09/23/1997	Childers et al			
545	F26	US-5,687,353		53		11/11/1997	Chen et al.			
8 h>	F27	US-5,7	08,6	24		01/13/1998	Leung			
SM	F28	US-5,7	78,2	37		07/07/1998	Yamamoto et	aL		
SVS	F29	US-5,8	29,02	26		10/27/1998	Leung et al.			
8h	F30	US-6,0	20,7	73		02/01/2000	Kan et al.			
SMO	F31	US-6,0	52,0	11		04/18/2000	Dasgupta			
حلكا	F32	US-6,701,480		30 I	31	03/02/2004	Karpuszka et al.			
3rs	F33	US-6,7:	38,88	33 F	32	05/18/2004	March et al.	-	·	
					FORE	IGN PATENT DO	CUMENTS			
	1	oreign Pa				Publication Date MM-DD-	Name of Patentee or Applicant of Cited		Pages, Columns, Lines Where Relevant Passages or Figures	T ⁶
	. .	my Code	Numi	per ⁴ Kind C	ode u	YYYY	Docur	nent	Appear	
		OTU	FD P	WCIDA:	ente a	neludine A-41 1	PM- D-4- P			
		VIII	ur D	COM	E17 1 2 (1	ncluding Author,	ille, D at e, Per	tinent Pages,	Etc.)	
										\dashv
	· 		<u>-</u>							\dashv
XAMINE	R SIGNA	TURE:		5			DATE CONSI	DERED:	3/-/07	-

Under the Paperwork Reduction Action of 1995, no persons are required to

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the reign of the Emperor must precede the serial number of the patent document. Sfind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patant and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patants, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9189 (1-800-780-9199) and select option 2. "EXAMINER: Initial if reference considered, whether or not obtain is in conformance with MPEP 909. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Petent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. SKind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English tanguage Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Application Number 10/645.861-7697 Substitute for form 1449A/PTO Filing Date 8/20/2003 INFORMATION DISCLOSURE First Named Inventor: Wingyu Leung STATEMENT BY APPLICANT Examiner: Stephen M. Baker **GROUP: 2133** (Use as many sheets as necessary) of Sheet **Attorney Docket Number** MST-012-1P U.S. PATENT DOCUMENTS Examiner Cited Document Number **Publication Date** Name of Patentee or Pages, Columns, Lines Number - Kind Code 2000 No. 1 Initials* MM-DD-YYYY Applicant of Cited Document Where Relevant Passages or Figures Appear F34 US-6,854,059 **B2** 02/08/2005 Gardner Ch F35 US-7,064,993 **B2** Gyohten et al. 06/20/2006 80 F36 US-7,099,216 **B2** 08/29/2006 Luk et al. 5/> F37 US-2002/0029365 Αl 03/07/2002 Sato et al. SM

FOREIGN PATENT DOCUMENTS													
Examiner Initials*	Cite No. ¹		Number ⁴ Kind Code ⁵ (f/haven)	Publication Date MM-DD- YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines Where Relevant Passages or Figures Appear	T⁵						
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)													

02/26/2004

03/04/2004

04/01/2004

09/02/2004

10/28/2004

08/25/2005

02/16/2006

LaBerge et al.

Jacquet et al.

Emerson et al.

Balazich et al.

Gyohten et al.

DATE CONSIDERED:

Harrand

Iain

F38

F39

F40

F41

F42

F43

F44

EXAMINER SIGNATURE:

8/0

200

ريري

S

So

sto Sto US-2004/0039883

US-2004/0044943

US-2004/0064646

US-2004/0172504

US-2004/0213064

US-2005/0185492

US-2006/0034132

Αl

A1

A1

A1

A1

Al

A1

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw the through citation if not in conformance and not copidered. Include copy of this form with next communication to explicent. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the Indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. This collection of information is required by 36 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the encount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Peterst and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1450. If you need assistance in complete forms, call 1-90-PTO-9199 (1-900-788-9199) and select option 2. "EXAMINER: Initial infertence considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with need communication to applicant. 1 Applicant's unique citation designation number (options). 2 See Kinds Codes of USPTO Patent Documents at www.septo.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the petent document. 5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Application Number 10/645,861-7697 Substitute for form 1449A/PTO Filing Date 8/20/2003 INFORMATION DISCLOSURE First Named Inventor: Wingyu Leung STATEMENT BY APPLICANT Examiner: Stephen M. Baker **GROUP: 2133** (Use as many sheets as necessary) Sheet Attorney Docket Number MST-012-1P U.S. PATENT DOCUMENTS Examiner Cited Document Number **Publication Date** Name of Patentee or Pages, Columns, Lines No. 1 Initials* Number - Kind Code 24/k MM-DD-YYYY Applicant of Cited Document Where Relevant Passages or Figures Appear F45 US-2006/0080589 500 **A1** 04/13/2006 Holm et al. Sm F46 US-2006/0156196 Al 07/13/2006 Takahashi et al. 5~ F47 US-2006/0158950 **A**1 07/20/2006 Klein SM F48 US-2006/0200723 A1 09/07/2006 Carnevale et al. F49 5 US-2006/0200728 **A**1 09/07/2006 Nagai et al. FOREIGN PATENT DOCUMENTS Examiner Cite Publication Pages, Columns, Lines Initials* No. 1 Foreign Patent Document Date Name of Patentee or Where Relevant MM-DD-**T**6 Applicant of Cited Passages or Figures Cntry Code³ Number⁴ Kind Code⁵ Minuted YYYY Document Appear OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) Bondurant, D. "15nsec Enhanced DRAM Upgrades System Performance in 72-Pin SIMM Socket", Silicon Valley 5 Personal Computer Design Conference Proceedings, Date Unknown, pp. 81-86 Dosaka et al. "A 100-Mhz 4-Mb Cache DRAM with Fast Copy-Back Scheme", IEEE Journal of Solid-State 51-Circuits, Vol. 27, No. 11, Nov. 1992, pp. 1534-1539 Sunaga et al. "A Full Bit Prefetch Architecture for Synchronous DRAM's", IEEE Journal of Solid-State Circuits, حلاك Vol. 30, No. 9, Sep. 1995, pp. 998-1005 My Pentium Processor 3.3V Pipelined BSRAM Specification, Ver. 2.0, Intel Corp., 25 May 1995, pp. 1-44 67 **EXAMINER SIGNATURE: DATE CONSIDERED:**

"EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds: Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible, 6 Applicant is to place a check mark here if English language Translation

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. This will vary depending upon the individual case. Any comments on the smount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SIEMD TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2. "EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through classion if not in conformance and not considered. Include copy of this form with next communication to applicant, 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Petent Documents at www.uspto.gov or MPEP 901.04.3. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.18 if possible, 6 Applicant is to place a check mark here if English language Translation is ettached.